

Amendments to and Listing of the Claims:

Please amend claims 1 and 3-58 so that the claims read as follows:

1. (currently amended) A material for a thermal fuse element wherein said material has an alloy composition in which In is 15 wt % or larger and smaller than 37 wt %, Sn is 5 wt % or larger and 28 wt % or smaller, and balance Bi, and in which, with respect to each of reference points of ternary Bi-In-Sn eutectic points of 57.5 wt %Bi-25.2 wt %In-17.3 wt %Sn and 54.0 wt %Bi-29.7 wt %In-16.3 wt %Sn, a range of ± 2 wt %Bi, ± 1 wt %In, and ± 1 wt %Sn is excluded, and wherein the alloy composition does not intentionally contain Pb or Cd.

2. (original) A material for a thermal fuse element wherein 0.1 to 3.5 weight parts of one, or two or more elements selected from the group consisting of Ag, Au, Cu, Ni, Pd, Pt, Sb, Ga, and Ge are added to 100 weight parts of an alloy composition of claim 1.

3. (currently amended) An alloy type thermal fuse wherein a material for a thermal fuse element of claim 1 is used as a fuse element.

4. (currently amended) An alloy type thermal fuse wherein a material for a thermal fuse element of claim 2 is used as a fuse element.

5. (currently amended) An alloy type thermal fuse according to claim 3, wherein said fuse element contains inevitable impurities.

6. (currently amended) An alloy type thermal fuse according to claim 4, wherein said fuse element contains inevitable impurities.

7. (currently amended) An alloy type thermal fuse according to claim 3, wherein said fuse element is connected between lead conductors, and at least a portion of each of said lead conductors which is bonded to said fuse element is covered with a Sn or Ag film.

8. (currently amended) An alloy type thermal fuse according to claim 4, wherein said fuse element is connected between lead conductors, and at least a portion of each of said lead conductors which is bonded to said fuse element is covered with a Sn or Ag film.

9. (currently amended) An alloy type thermal fuse according to claim 5, wherein said fuse

element is connected between lead conductors, and at least a portion of each of said lead conductors which is bonded to said fuse element is covered with a Sn or Ag film.

10. (currently amended) An alloy ~~type~~ thermal fuse according to claim 6, wherein said fuse element is connected between lead conductors, and at least a portion of each of said lead conductors which is bonded to said fuse element is covered with a Sn or Ag film.

11. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 3, wherein a pair of film electrodes are formed on a substrate by printing conductive paste containing metal particles and a binder, said fuse element is connected between said film electrodes, and said metal particles are made of a material selected from the group consisting of Ag, Ag-Pd, Ag-Pt, Au, Ni, and Cu.

12. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 4, wherein a pair of film electrodes are formed on a substrate by printing conductive paste containing metal particles and a binder, said fuse element is connected between said film electrodes, and said metal particles are made of a material selected from the group consisting of Ag, Ag-Pd, Ag-Pt, Au, Ni, and Cu.

13. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 5, wherein a pair of film electrodes are formed on a substrate by printing conductive paste containing metal particles and a binder, said fuse element is connected between said film electrodes, and said metal particles are made of a material selected from the group consisting of Ag, Ag-Pd, Ag-Pt, Au, Ni, and Cu.

14. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 6, wherein a pair of film electrodes are formed on a substrate by printing conductive paste containing metal particles and a binder, said fuse element is connected between said film electrodes, and said metal particles are made of a material selected from the group consisting of Ag, Ag-Pd, Ag-Pt, Au, Ni, and Cu.

15. (currently amended) An alloy ~~type~~ thermal fuse according to claim 3, wherein a heating element for fusing off said fuse element is additionally disposed.

16. (currently amended) An alloy ~~type~~ thermal fuse according to claim 4, wherein a

heating element for fusing off said fuse element is additionally disposed.

17. (currently amended) An alloy **type** thermal fuse according to claim 5, wherein a heating element for fusing off said fuse element is additionally disposed.

18. (currently amended) An alloy **type** thermal fuse according to claim 6, wherein a heating element for fusing off said fuse element is additionally disposed.

19. (currently amended) An alloy **type** thermal fuse according to claim 7, wherein a heating element for fusing off said fuse element is additionally disposed.

20. (currently amended) An alloy **type** thermal fuse according to claim 8, wherein a heating element for fusing off said fuse element is additionally disposed.

21. (currently amended) An alloy **type** thermal fuse according to claim 9, wherein a heating element for fusing off said fuse element is additionally disposed.

22. (currently amended) An alloy **type** thermal fuse according to claim 10, wherein a heating element for fusing off said fuse element is additionally disposed.

23. (withdrawn-currently amended) An alloy **type** thermal fuse according to claim 11, wherein a heating element for fusing off said fuse element is additionally disposed.

24. (withdrawn-currently amended) An alloy **type** thermal fuse according to claim 12, wherein a heating element for fusing off said fuse element is additionally disposed.

25. (withdrawn-currently amended) An alloy **type** thermal fuse according to claim 13, wherein a heating element for fusing off said fuse element is additionally disposed.

26. (withdrawn-currently amended) An alloy **type** thermal fuse according to claim 14, wherein a heating element for fusing off said fuse element is additionally disposed.

27. (withdrawn-currently amended) An alloy **type** thermal fuse according to claim 3, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

28. (withdrawn-currently amended) An alloy **type** thermal fuse according to claim 4, wherein said fuse element connected between a pair of lead conductors is sandwiched between

insulating films.

29. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 5, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

30. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 6, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

31. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 7, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

32. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 8, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

33. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 9, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

34. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 10, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

35. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 11, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

36. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 12, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

37. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 13, wherein said fuse element connected between a pair of lead conductors is sandwiched between

insulating films.

38. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 14, wherein said fuse element connected between a pair of lead conductors is sandwiched between insulating films.

39. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 3, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

40. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 4, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

41. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 5, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

42. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 6, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

43. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 7, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

44. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 8, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

45. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 9, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

46. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 10, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

47. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 11, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

48. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 12, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

49. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 13, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

50. (withdrawn-currently amended) An alloy ~~type~~ thermal fuse according to claim 14, wherein a pair of lead conductors are partly exposed from one face of an insulating plate to another face, said fuse element is connected to said lead conductor exposed portions, and said other face of said insulating plate is covered with an insulating material.

51. (currently amended) An alloy ~~type~~ thermal fuse according to claim 3, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said flux-applied fuse element is passed through a cylindrical case, gaps between ends of said cylindrical case and said lead conductors are sealingly closed, ends of said lead conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said

disks.

52. (currently amended) An alloy **type** thermal fuse according to claim 4, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said flux-applied fuse element is passed through a cylindrical case, gaps between ends of said cylindrical case and said lead conductors are sealingly closed, ends of said lead conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said disks.

53. (currently amended) An alloy **type** thermal fuse according to claim 5, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said flux-applied fuse element is passed through a cylindrical case, gaps between ends of said cylindrical case and said lead conductors are sealingly closed, ends of said lead conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said disks.

54. (currently amended) An alloy **type** thermal fuse according to claim 6, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said flux-applied fuse element is passed through a cylindrical case, gaps between ends of said cylindrical case and said lead conductors are sealingly closed, ends of said lead conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said disks.

55. (currently amended) An alloy **type** thermal fuse according to claim 7, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said flux-applied fuse element is passed through a cylindrical case, gaps between ends of said cylindrical case and said lead conductors are sealingly closed, ends of said lead conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said disks.

56. (currently amended) An alloy **type** thermal fuse according to claim 8, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said flux-applied fuse element is passed through a cylindrical case, gaps between ends of said cylindrical case and said lead conductors are sealingly closed, ends of said lead

conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said disks.

57. (currently amended) An alloy ~~type~~ thermal fuse according to claim 9, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said flux-applied fuse element is passed through a cylindrical case, gaps between ends of said cylindrical case and said lead conductors are sealingly closed, ends of said lead conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said disks.

58. (currently amended) An alloy ~~type~~ thermal fuse according to claim 10, wherein lead conductors are bonded to ends of said fuse element, respectively, a flux is applied to said fuse element, said flux-applied fuse element is passed through a cylindrical case, gaps between ends of said cylindrical case and said lead conductors are sealingly closed, ends of said lead conductors have a disk-like shape, and ends of said fuse element are bonded to front faces of said disks.